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## NOTICE OF ALLOWANCE AND FEE(S) DUE

22917 7590 03/07/2008 MOTOROLA, INC. 1303 EAST ALGONQUIN ROAD ILOI/3RD

SCHAUMBURG, IL 60196

EXAMINER

DEAN, RAYMOND S

ART UNIT PAPER NUMBER

2618

DATE MAILED: 03/07/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/654,227	09/03/2003	Philippe J. Sartori	CML00917M	4742

TITLE OF INVENTION: METHOD AND APPARATUS FOR RELAY FACILITATED COMMUNICATIONS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(8) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	06/09/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

appropriate. All further indicated unless corrects maintenance fee notifica	correspondence includir ed below or directed oth tions.	or transmi ng the Pate nerwise in	ent, advance or Block 1, by (a	ders and notification  i) specifying a new co	of m scress	aintenance fees woondence address;	ill be and/or	mailed to the current (b) indicating a sepa	corresponder of the correspondence of the co	oondence address as EE ADDRESS" for
CURRENT CORRESPOND	ENCE ADDRESS (Note: Use Bi	ock 1 for any	change of address)		Note Fee(s pape) have	: A certificate of s) Transmittal. Thi rs. Each additional its own certificate	mailing s certif l paper of mai	can only be used for icate cannot be used for such as an assignme ling or transmission.	r dome or any nt or fo	stic mailings of the other accompanying ormal drawing, must
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SCHAUMBURG	G, IL 60196									(Depositor's name)
										(Signature)
										(Date)
APPLICATION NO.	FILING DATE			FIRST NAMED INVENTOR			ATTORNEY DOCKET NO. CO			FIRMATION NO.
10/654,227 TITLE OF INVENTION	09/03/2003 : METHOD AND APPA	RATUS F	FOR RELAY F	Philippe J. Sartori ACILITATED COMM		ICATIONS		CML00917M		4742
APPLN, TYPE	SMALL ENTITY	ISSUE	FEE DUE	PUBLICATION FEE D	UE	PREV. PAID ISSUE	FEE	TOTAL FEE(S) DUE	Т	DATE DUE
nonprovisional	NO	S	§1440	\$300	_	\$0 \$1740		\$1740		06/09/2008
EXAM	IINER	AR	T UNIT	CLASS-SUBCLASS	$\neg$					
DEAN, RA	YMOND S		2618	455-007000	_					
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required.  3. ASSIGNEE NAME A	ondence address (or Cha 8/122) attached. ication (or "Fee Address 12 or more recent) attach ND RESIDENCE DATZ less an assignce is ident h in 37 CFR 3.11. Comp	nge of Cor " Indication ed. Use of A TO BE P	n form a Customer		p to nativ ingle or a attor I be p r type r type ac pa	3 registered paten ely, firm (having as a gent) and the name neys or agents. If a printed.	membes of uno name	er a 2		at has been filed for
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4a. The following fee(s) are submitted:    Issue Fee   Publication Fee (No small entity discount permitted)   Advance Order - # of Copies				40. Payment of Fee(s): (Please first reapply amy previously paid issue fee shown above)    A check is enclosed.   Payment by credit card. Form PTO-2038 is attached.   The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Depoist Account Number (enclose an extra copy of this form).						
- 11	s SMALL ENTITY state	is. See 37 (						TTY status. See 37 Cl		
NOTE: The Issue Fee an interest as shown by the	a runtication Fee (if req records of the United Sta	uired) will tes Patent :	not be accepted and Trademark	o irom anyone other the Office.	an th	e applicant; a regi	stered a	utorney or agent; or th	e assig	nee or other party in
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P O Box 1450 Www.uspio.gov

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10/654,227	09/03/2003	Philippe J. Sartori	CML00917M	4742			
22917	22917 7590 03/07/2008			EXAMINER			
MOTOROLA, INC.			DEAN, RAYMOND S				
	ONQUIN ROAD		ART UNIT	PAPER NUMBER			
IL01/3RD SCHAUMBURG, IL 60196			2618 DATE MAILED: 03/07/2008				

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

## Notice of Allowability

Application No.	Applicant(s)				
10/654,227	SARTORI ET AL.				
Examiner	Art Unit				
RAYMOND S DEAN	2618				

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- This communication is responsive to December 5, 2007.
- The allowed claim(s) is/are 1-10,12-14,17-22,25,28-34, 35-48.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - b) ☐ Some\* c) ☐ None of the: a)  $\square$  All
    - 1. T Certified copies of the priority documents have been received.
    - 2. Certified copies of the priority documents have been received in Application No.
      - 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) hereto or 2) to Paper No./Mail Date
  - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. 

DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

- 1. | Notice of References Cited (PTO-892)
- 2. Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08). Paper No./Mail Date
- 4. T Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date
- 7. X Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- Other .

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## DETAILED ACTION

## EXAMINER'S AMENDMENT

 An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Attorney Steven May (Reg. No. 44,912) on February 15, 2008.

Regarding Claim 48

Please insert the phrase "comprising: a resource allocator" in between the word "base site" and the word "that" in line 2

Please replace the word "a" with the word "the" in between the word "from" and the word "transmitter" in line 3.

Please replace the word "that" with the phrase ", wherein the transmitter in between the word "transmitter" and the word "is" in line 3.

Please insert the word "and" in between the comma "," and "automatically" in line 4.

Please replace the word "a" with the word "the" in between the word "allocate" and the word "wireless" in line 4.

Please replace the comma "," with the phrase "; and" after the word "resource" in line 7.

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Please insert the phrase "a relay resource activator that is configured to" in front of the word "provide" in line 8.

Please insert the word "and" in between the comma "," and the word "wherein" in line 12.

Delete the word "and" in line 13.

Please remove lines 14 - 16 from the bottom of Claim 48 and insert lines 14 - 16 after "comprising:" in line 1. The limitations in lines 14 - 16 will now be the first set of limitations in Claim 48.

## Allowable Subject Matter

2. The following is an examiner's statement of reasons for allowance:

The prior art of record fails to teach or show the combining received portions of relayed transmissions from at least one wireless relay resource with portions redundant transmissions from the transmitter to reconstruct the transmission.

The prior art of record fails to teach or show this redundant feature, which is prevalent in HARQ and ARQ schemes, in the repeater or relay field of endeavor. The prior art of record fails to teach or show a wireless relay resource configured to combine received portions of relayed transmissions from the transmitter using hybrid automatic repeat request (HARQ) to reconstruct the transmission. The prior art of record also fails to teach or show a wireless relay resource that will: determine whether the transmission has been likely correctly received; when the transmission is determined to have been likely correctly received, re-encode the

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decoded information to provide re-encoded information; and transmit the reencoded information to the base site: and not transmit to the base site any
relayed transmissions that are determined to not have been likely correctly
received. Claim 1, including all claims that depend directly or indirectly from Claim 1,
Claim 20, including all claims that depend directly or indirectly from Claim 20, Claim 34,
including all claims that depend directly or indirectly from Claim 34, Claim 41, including
all claims that depend directly or indirectly from Claim 41, and Claim 48 are therefore
allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### Conclusion

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond S. Dean whose telephone number is 571-272-7877. The examiner can normally be reached on Monday-Friday 6:00-2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F. Urban can be reached on 571-272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Raymond S Dean/ Primary Examiner, Art Unit 2618 /Edward Urban/ Supervisory Patent Examiner, Art Unit 2618

Raymond S. Dean February 19, 2008